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Suggestions or comments concerning this publication should be addressed to: Joan C. Courtless, Editor, Family Economics Review, Family Economics Research Group, USDA/ARS, Federal Building, Room 439A, Hyattsville, MD 20782.

To Our Readers:

Frankie N. Schwenk is the new Research Leader for the Family Economics Research Group. Readers of Family Economics Review may recall that Dr. Schwenk was a member of our staff for 7 years before accepting a position in the private sector in 1987. Dr. Schwenk received B.S. and M.S. degrees from Iowa State University and her Ph.D. from the University of Maryland. We are very glad to welcome her back.

About our authors —

Mark Lino's first article for Family Economics Review, "Financial Status of Single-Parent Households," is found on pages 2–7 of this issue. Dr. Lino joined the Family Economics Research Group in October 1987 after receiving his Ph.D. from Cornell University.

Jacquelyn McCray presented her talk on "Housing Affordability: Concepts and Reality," pages 14–18, at the Outlook for Families session of the Agricultural Outlook Conference held on November 30, 1988. Dr. McCray is the Assistant Administrator for 1890 Agricultural Programs (research and extension) at the University of Arkansas at Pine Bluff.

Joan C. Courtless
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February 1989

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Financial Status of Single-Parent Households

By Mark Lino
Consumer Economist
[Family Economics Research Group]

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Single-parent households are one of the fastest growing segments of the population in the United States and one of the most economically vulnerable. This article examines income and income sources, and expenditures and expenditure shares of these households for the 1984-85 period. Average annual before-tax income for single-parent households was \$16,974. Lower incomes were reported for non-white households (\$10,455) and those with a head below age 30 (\$6,803). The largest share of income was from salary or wages (78%); this held regardless of the sex, age, or race of the single parent or household size. Average annual expenditures for single-parent households were \$16,541. Housing composed the largest share of total expenditures (35%), followed by transportation (20%), for most subgroups of single-parent households. Total expenditures exceeded annual income for 42% of single-parent households. These findings should give family resource management professionals a better understanding of the financial status of single-parent households, an important segment of their clientele.

The number of single-parent households in the United States has increased from 3.2 million (11% of all households with children) in 1970 to 6.9 million (22%) in 1985 (3). These households are expected to comprise an increasing share of all households with children in the future (3). Given this trend, family resource management professionals need to be aware of the financial status of single-parent households, a growing segment of their potential clientele.

This article examines the income and sources of income and expenditures and allocation of expenditures of single-parent households. Further

analysis of income and expenditures by sex, age, and race of the single parent and household size is included.

Data and Sample

Data used in this study are from the interview component of the Consumer Expenditure Survey for the 1984-85 period. The Survey collects information on household expenses and income and has been conducted on a continuous basis since 1980. Prior to 1980, surveys were undertaken about every 10 years, most recently in 1960-61 and 1972-73. A national probability sample of households designed to represent the noninstitutionalized population of the United States is interviewed each quarter over a 1-year period. After the final interview, the household is dropped from the Survey and replaced by a new unit. The data are regarded as the most comprehensive source of household expenditure information available at the national level (2).

Included in the analysis were survey households that (1) were classified as male or female one-parent families with at least one child under age 18, (2) had completed income records, and (3) had reported expenditures for a 12-month period. Single-parent households who reside with other family members or friends were not included in the analysis because they could not be identified in the data.

The final sample consisted of 224 single-parent households. These

households were analyzed overall and by sex, age, and race of the single parent and household size. These four characteristics were chosen to distinguish among different types of single-parent households. The sample was weighted using Consumer Expenditure Survey methods to represent the total population of single-parent households in the United States during the 1984-85 period.

The majority of single-parent households (84%) were headed by a female. Average age of the single parent was 38 years; 20% of single parents were below age 30, 42% between ages 30 and 40, and 38% above age 40. Most single-parent households (75%) were white. The average household size of a single-parent household was three members (two children); 42% of single-parent households had two members, 33% had three members, and 25% had four or more members.

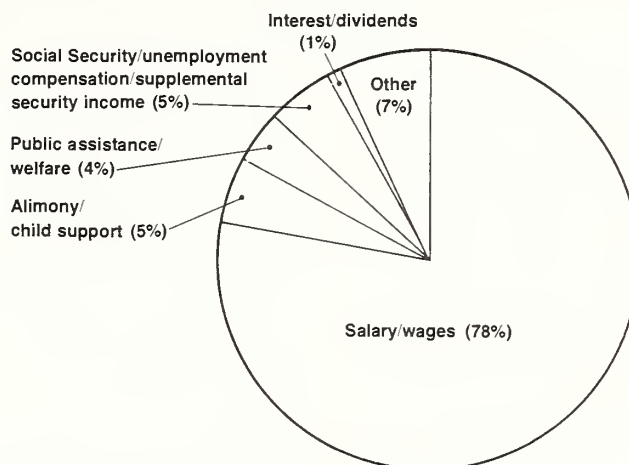
Income and Income Sources of Single-Parent Households

During the 1984-85 period (figure 1, p. 3), average annual before-tax income reported by single-parent households was \$16,974, and average annual after-tax income reported was \$15,623.¹ Salary or wages, at 78% of annual income, was the largest source of income for single-parent households. Other sources of income (rents, gifts, food stamps, etc.) accounted for 7% of annual income. Alimony and/or child support and public assistance composed only a small part of annual income, 5% and 4% respectively (see box, p. 3).

¹ The percentage of single-parent households who received income from various sources was as follows: Salary or wages, 76%; alimony and/or child support, 34%; interest and/or dividends, 27%; public assistance or welfare, 21%; and Social Security (also, government, veterans, and railroad retirement), unemployment compensation, and/or supplemental security income, 16%.

The small share of income from alimony and/or child support is not surprising. A study conducted in 1984 by the Bureau of the Census, U.S. Department of Commerce, and sponsored in part by the Office of Child Support Enforcement, U.S. Department of Health and Human Services, found that 14% of ever-divorced or currently separated women had been awarded alimony payments. Of the 791,000 women due alimony in 1983, 77% received at least some portion of their award. This same study also found that 58% of women with children from an absent father had been awarded child support. Of the 4 million women due such support in 1983, approximately 50% received the full amount, 26% received less than the full amount, and 24% did not receive any child support (4).

(Figure 1)
Income and Income Sources of Single-Parent Households, 1984-85



Before-tax income: \$16,974
After-tax income: \$15,623
Household size: 3

The average annual income and sources of income of single-parent households in this study varied by the sex, age, and race of the single parent and household size (table 1). Male-headed single-parent households had a before-tax income more than twice that of female-headed single-parent households (\$35,312 vs. \$13,528). However, both had an average household size of three members. Salary or wages composed the majority of before-tax income for both groups but made up a larger percentage for male-headed households (92%) than female-

headed households (72%). Male heads of single-parent households participated in the labor force to a greater degree than did female heads; also, when employed, the males were more likely to occupy higher paying jobs. Of the male heads, 86% were working, and 54% of these workers held managerial or professional jobs; among female heads, 73% were working, and 30%

of these workers held managerial or professional jobs. Other forms of income accounted for a very small share of total income for male-headed single-parent households. These other forms of income were generally more important for female-headed single-parent households, but they were still minor relative to salary or wages.

Table 1. Income and income sources of single-parent households, by sex, age, and race of single parent,¹ and household size, 1984-85

Income and sources	Sex		Age (years)			Race		Household size		
	Male	Female	< 30	30-40	> 40	White	Nonwhite	2	3	≥ 4
Before-tax income	\$35,312	\$13,528	\$6,803	\$15,764	\$23,554	\$19,161	\$10,455	\$13,763	\$17,863	\$21,261
After-tax income	30,049	12,912	6,470	14,770	21,284	17,558	9,856	12,709	17,310	18,337
Percent										
Salary and wages	92	72	56	79	81	80	71	70	84	81
Alimony and/or child support . .	0	7	7	5	4	5	3	4	7	3
Public assistance	0	6	23	5	1	3	13	4	3	6
Social Security, unemployment compensation, and/or supplemental security income	3	7	2	5	6	5	6	10	3	4
Interest and/or dividends	1	1	1	1	1	1	0	1	1	1
Other sources	4	7	12	5	6	6	7	11	2	5

¹ Average household size was 3 for each sex, age, and race subgroup.

Source: U.S. Department of Labor, Bureau of Labor Statistics, 1984-85 Consumer Expenditure Survey.

As age of the single parent increased so did household income; average household size was three for all age groups. Single-parent households headed by a parent below age 30 had an average before-tax income of \$6,803, compared with single-parent households headed by a parent above age 40 that had an average before-tax income of \$23,554. Salary or wages accounted for a smaller share (56%) of before-tax income for single-parent households headed by a parent below age 30 and a larger share (81%) for single-parent households headed by a parent above age 40. This lower salary or wage income of single-parent households with a head below age 30 is probably due to the greater number of younger children in these households, resulting in a lower employment rate for the single parent. Of single-parent households with a head below age 30, 87% had a child below age 6 in the household, and 39% of the heads were not working; these figures were 13% and 24%, respectively, for single-parent households with a head above age 40. As a consequence, public assistance accounted for 23% of before-tax income for single-parent households with a head below age 30, compared with 1% for single-parent households with a head above age 40. The higher salary or wage income of single-parent households with a head above age 40 is probably due to their higher employment rate, accumulation of job skills and seniority, and possible contributions by older children.

White single-parent households had a before-tax income nearly double that of nonwhite single-parent households (\$19,161 vs. \$10,455). Both had an average household size of three members. Salary or wages comprised the majority of before-tax income for both groups but made up a larger percentage for white households (80%) than nonwhite households (71%). White single parents were

working in the labor force to a greater degree than were nonwhite single parents (81%, compared with 59%). Also, when working, white single parents were more likely to occupy higher paying jobs; 39% of them, compared with 21% of nonwhite single parents held managerial or professional jobs. For white single-parent households, other sources of income (rents, gifts, food stamps, etc.) were the second largest income source, 6% of before-tax income. Public assistance, 13% of before-tax income, was the second largest income source for nonwhite single-parent households.

As household size increased so did the income of the single-parent household. However, per capita income decreased. The before-tax per capita income for a single-parent household with two members (one child) was \$6,882, compared with \$4,252 for a single-parent household with five members (four children). Other sources of income, together with Social Security, unemployment compensation, and/or supplemental security income accounted for a relatively large percentage of income (11% and 10%, respectively) for single-parent households with two members.

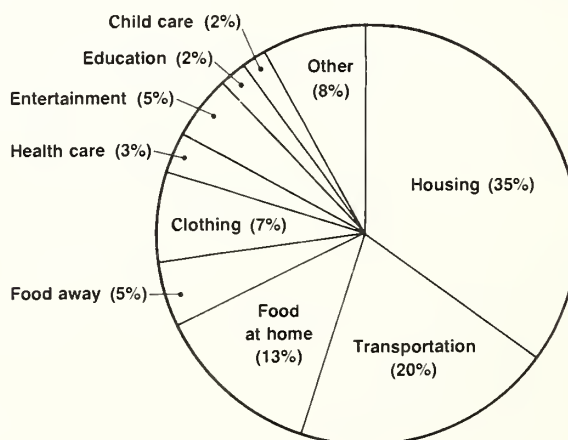
Expenditures and Expenditure Shares of Single-Parent Households

Average annual expenditures reported by single-parent households was \$16,541 during the 1984-85 period (figure 2).² Housing accounted for the largest share of total expenditures by single-parent households (35%), followed by transportation (20%), and food at home (13%). A previous study by the Family Economics Research Group also found that housing, transportation, and food accounted for the bulk of single-parent household expenditures in 1972-73 (1).

Total expenditures by a household is considered to be underestimated by approximately 5% to 20% in the interview component of the Consumer Expenditure Survey (2). Some minor expenditures are not covered by the interview component of the Survey, and it is

² The percentages of single-parent households reporting a particular expenditure were as follows: Food at home, 100%; housing, 100%; clothing, 98%; transportation, 96%; entertainment, 96%; food away from home, 92%; health care, 86%; education, 60%; and child care, 34%.

(Figure 2)
Expenditures and Expenditure Shares of Single-Parent Households, 1984-85



Total expenditures: \$16,541
Household size: 3

unlikely that all expenditures of a household in a given year are reported. The housing and "other" expenditure components are believed to be the budgetary components where underestimates are more prevalent.

The average annual expenditures and allocation of expenditures of single-parent households in this study varied by the sex, age, and race of the single parent and household size (table 2). Male-headed single-parent households had average total expenditures that were much higher than single-parent households headed by a female (\$24,626 vs. \$15,022). However, the allocation of expenditures between male- and female-headed households was very similar (within two percentage points) except for food and entertainment. Food at home accounted for 10% of total expenditures for single-parent households headed by a male and 15% for single-parent households headed by a female, yet the actual dollar amount was similar between the two groups. Food away from home and entertainment expenditures made up a larger share of total expenditures for male-headed (7% each) as opposed to female-headed households (4% each). This

is not surprising since these two items may be regarded as discretionary components of the budget that are more affordable to higher income households.

As a single parent grew older and income increased, so did total expenditures. Single-parent households with a head below age 30 had average total expenditures of \$9,565, whereas those with a head above age 40 had average total expenditures of \$20,086. The greater dollar amount spent on housing as age of the single parent increases may indicate the purchase of a home—12% of single parents below age 30 were homeowners, compared with 69% of those above age 40. Similarly, the greater dollar amount spent on transportation as the age of the single parent increases may indicate the purchase of an automobile—50% of single parents below age 30 owned a car, compared with 80% of those above age 40. Child care expenses as a share of total expenditures and in actual dollar amount were highest for single-parent households with a head below age 30. The greater presence of younger children in these households probably accounts for this.

White single-parent households had average total expenditures nearly double those of nonwhite single-parent households (\$18,739 vs. \$9,991). Housing and food at home made up a larger share of total expenditures for nonwhite (39% and 19%) than for white households (35% and 12%). However, the actual dollar amount spent on housing was lower for nonwhite households, and the dollar amount spent on food at home was about the same. Expenditures on transportation were very different between the two groups. Transportation expenditures accounted for 22% of total expenditures for white single-parent households and 11% for nonwhite single-parent households. The low automobile ownership rate among nonwhite single-parent households was probably a contributing factor—56% of nonwhite single-parent households did not own an automobile, compared with 18% of white single-parent households.

As household size increased, per capita total expenditures decreased. Single-parent households with two members (one child) had per capita expenditures of \$7,173, compared with \$3,358 for households with five members (four children).

Table 2. Expenditures and expenditure shares of single-parent households, by sex, age, and race of single parent,¹ and household size, 1984-85

Expenditure category	Sex		Age (years)			Race		Household size		
	Male	Female	< 30	30-40	> 40	White	Nonwhite	2	3	≥ 4
Total expenditures	\$24,626	\$15,022	\$9,565	\$16,586	\$20,086	\$18,739	\$9,991	\$14,345	\$19,158	\$16,790
	<u>Percent</u>									
Housing	36	35	38	37	33	35	39	38	33	36
Transportation	19	20	20	19	21	22	11	17	24	17
Food at home	10	15	17	14	12	12	19	12	13	16
Food away	7	4	2	5	6	5	4	5	5	5
Clothing	6	7	6	7	7	7	9	7	7	8
Health care	3	3	2	3	3	3	2	4	3	3
Entertainment	7	4	4	5	5	5	5	5	5	6
Education	3	1	1	1	3	2	1	1	2	3
Child care	1	2	5	2	1	2	1	3	2	0
Other	8	7	6	7	7	7	8	8	6	6

¹ Average household size was 3 for each sex, age, and race subgroup.

Source: U.S. Department of Labor, Bureau of Labor Statistics, 1984-85 Consumer Expenditure Survey.

Income and Expenditures of Single-Parent Households Over Time

By comparing findings from this study with those from previous Consumer Expenditure Surveys (1960-61 and 1972-73),¹ possible trends in the income and expenditures of single-parent households may be identified. Based on these trends, predictions for the future may be made.

Looking at the income of single-parent households, their average before-tax real income (in 1984-85 dollars) decreased by approximately 8% from 1960-61 to 1984-85 (table 3). Average household size held constant at three members. Per capita income has thereby declined for single-parent households over this time period.

Sources of income for single-parent households have changed considerably from 1972-73 to 1984-85. (Sources of income were not collected in 1960-61.) Salary or wages comprised an increasing share of before-tax income, from

58% in 1972-73 to 78% in 1984-85. In contrast, a decreasing share of before-tax income over this time was derived from alimony and/or child support (from 10% to 5%) and public assistance (from 14% to 4%).

Real total expenditures (in 1984-85 dollars) of single-parent households increased approximately 13% from 1960-61 to 1984-85 (table 4). This is an approximate percentage because total expenditures in the 1960-61 Survey did not include certain expenditures such as personal insurance, contributions, and so forth. However, it is not likely that these expenditures comprised a large share of total expenditures for single-parent households. Housing comprised the largest share of total expenditures over this period. Housing also increased as a share of total expenditures from 1960-61 to 1984-85 (from 30% to 35%). Increases in housing prices during this time, as well as the increased percentage of single-parent households owning a home (from 40% in 1960-61 to 48% in 1984-85), were probably major contributing factors affecting this trend. Transportation gradually replaced food at home as the second largest expenditure

category for single-parent households. The increase in automobile ownership among single-parent households (from 50% in 1960-61 to 72% in 1984-85) probably influenced this changing expenditure pattern.

Clothing and health care expenditures of single-parent households declined as a share of total expenditures and in real dollars from 1960-61 to 1984-85. The decline in health care expenditures may be attributed to the greater labor force participation of single parents in 1984-85, with employer-provided medical benefits.

The average difference between after-tax income and total expenditures for single-parent households in real terms (1984-85 dollars) was positive in 1960-61 and negative in 1984-85. Hence, it appears the financial stability of single-parent households has worsened over time due to a decline in real income coupled with an increase in real expenditures. Given predicted future rises in housing and transportation costs, along with smaller increases in salaries and wages, it is expected that the financial stability of single-parent households in the future can only weaken.

¹ Due to variations in income and expenditure classification among the three surveys, adjustments were made to facilitate data comparison by following procedures suggested by the Bureau of Labor Statistics. Specific exceptions are identified and explained in the text.

As household size increased, food at home expenditures generally increased by a higher dollar amount than housing or transportation expenditures. Greater economies of scale may be achieved with housing and transportation than with food at home. Child care expenditures generally decreased as household size increased. Older brothers and sisters likely substitute for paid child care in single-parent households with more than one child.

Conclusion

Although the income and expenditures of single-parent households denote financial status, the difference between after-tax income and total expenditures for 1 year may indicate relative financial stability. After-tax income exceeding expenditures represents possible savings for a household, whereas expenditures exceeding after-tax income suggests the household faces a debt.

A substantial minority of single-parent households (42%) had total expenditures that exceeded their after-tax income during the 1984-85 period. On average, single-parent households faced a debt of \$900 (total expenditures of \$16,541, compared with after-tax income of \$15,623). A higher incidence of expenditures exceeding income was seen in single-parent households that were headed by a female or by a

Table 3. Real income and income sources of single-parent households over time^{1, 2}

[1984-85 dollars]

Income and sources	1960-61	1972-73	1984-85
Before-tax income	\$18,423	\$14,498	\$16,974
After-tax income	\$16,876	\$13,159	\$15,623
<hr/>			
	<u>Percent</u>		
Salary and wages	(3)	58	78
Alimony and/or child support	(3)	10	5
Public assistance	(3)	14	4
Social Security and unemployment compensation and/or supplemental security income	(3)	⁴ 11	5
Interest and/or dividends	(3)	1	1
Other sources	(3)	6	7

¹ Annual average hourly earnings, published by the Bureau of Labor Statistics, were used to convert income data.

² Average household size was 3 for each survey period.

³ Income breakdown was not collected in 1960-61.

⁴ In 1972-73 supplemental security income was included in "other sources."

Source: U.S. Department of Labor, Bureau of Labor Statistics, 1960-61, 1972-73, and 1984-85 Consumer Expenditure Survey.

Table 4. Real expenditures and expenditure shares of single-parent households over time^{1, 2}

[1984-85 dollars]

Expenditure category	1960-61	1972-73	1984-85 ³
Total expenditures	\$14,670	\$16,095	\$16,541
<hr/>			
	<u>Percent</u>		
Housing	30	37	35
Transportation	13	15	20
Food at home	20	17	13
Food away from home	5	5	5
Clothing	11	10	7
Entertainment	4	4	5
Health care	6	4	3
Education	1	1	1
Other ⁴	10	7	10

¹ Consumer Price Index annual averages, published by the Bureau of Labor Statistics, were used to convert expenditure data.

² Average household size was 3 for each survey period.

³ Total expenditures for 1984-85 includes some expenditures (personal insurance, contributions, etc.) not included in total expenditures for the 1960-61 and 1972-73 Surveys.

⁴ Includes child care.

Source: U.S. Department of Labor, Bureau of Labor Statistics, 1960-61, 1972-73, and 1984-85 Consumer Expenditure Survey.

single parent below age 30. Since total expenditures are probably underestimated, the percentage of single-parent households with expenditures exceeding income is likely to be higher than reported here, and the percentage having income exceeding expenditures is likely to be lower.

Data used in this analysis were only for a 1-year period. Future income increases may have been anticipated by some households. If single-parent households whose total expenditures exceeded their after-tax income have future income that would cover current expenditures, then their tenuous financial situation could be alleviated. Without additional income in the future, these households face increasingly severe financial problems.

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Recent Trends In Clothing And Textiles¹²

By Joan C. Courtless
Family Economist

[Family Economics Research Group]

A major determinant of consumer expenditures for clothing and textiles is price. Each year prices are ultimately affected by economic, agricultural, and technological factors such as international trade, fiber supplies, Federal regulations, and research developments. In 1988 annual spending for clothing and shoes is expected to exceed that for 1987 by \$15 per person; all of this increase can be attributed to higher prices. Per capita spending for clothing and shoes in constant 1982 dollars is expected to decline by \$10 from the 1987 level. Although the textile and apparel trade deficit declined during the first 8 months of 1988, its share of the total U.S. merchandise trade deficit grew from 15.0% in 1987 to 17.9% in 1988. U.S. mill consumption of total fibers is estimated to be down by 2.2% from 1987 levels. Current USDA research on fibers and fabrics, new developments from the apparel industry, and innovative applications of computer technology to marketing apparel are described to provide professionals in clothing and textiles and related areas with an overall perspective on trends in fibers, fabrics, and apparel.

Clothing Expenditures and Prices

In 1988, prices for apparel commodities, as measured by the Consumer Price Index (CPI), rose 5.7% over 1987 (table 1). This is the fourth consecutive year in which the rate of increase in clothing prices was greater than that for the overall CPI. Increases were moderate yet widespread among the various categories of apparel and footwear, with each apparel category increasing between 2% and 9%.

Annual spending for clothing and shoes in 1988 is estimated at \$747

¹This article is adapted from a paper distributed at the Annual Agricultural Outlook Conference in November 1988 in Washington, DC.

per person, according to preliminary figures for the first three quarters of 1988 (table 2). This amount exceeds 1987 spending by \$15 per person, entirely attributable to higher prices. When the effect of inflation is removed (indicated by constant dollars in table 2), per capita expenditures for clothing and shoes declined for the first time since 1974. Also, the percentage of personal consumption expenditures for clothing and shoes (in constant dollars) declined for the first time since 1976. Consumers were allocating more of their

outlays to services and durable goods (3), with an absolute decline in real spending for clothing and shoes as the result. Throughout the first 8 months of 1988, the apparel industry experienced increasing retail inventories (3); by March the ratio of inventories to sales at apparel specialty stores had reached a record high (2). Consumers appear to be resisting the higher prices for clothing by buying less.

Surveys of the American Apparel Consumer

Simmons Market Research Bureau compared women's apparel purchases made by working mothers in 1987 with the average purchases made by a national sample of women in 1986. A higher percentage of working mothers bought each item of apparel, and a higher percentage of working mothers bought multiple purchases of each item. Only shoes and pantyhose were purchased by

Table 1. Percent change in prices of apparel commodities, December 1987 to September 1988¹

Group and item	Percent change (annualized)
All items	5.1
Apparel commodities	5.7
Men's and boys'	4.9
Men's	5.5
Suit, sport coats, coats, and jackets	9.1
Furnishings and special clothing	3.9
Shirts	5.4
Dungarees, jeans, and trousers	4.0
Boys'	2.4
Women's and girls'	6.0
Women's	6.0
Coats and jackets	2.7
Dresses	7.4
Separates and sportswear	6.1
Underwear, nightwear, hosiery, and accessories	5.1
Suits	8.3
Girls'	5.8
Infants' and toddlers'	5.9
Other apparel commodities	6.8
Sewing materials, notions, and luggage	9.1
Watches and jewelry	6.4
Footwear	5.8
Men's	8.8
Boys' and girls'	4.0
Women's	4.6

¹ Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W).

Source: Calculated from the CPI Detailed Report, December 1987 and September 1988, U.S. Department of Labor, Bureau of Labor Statistics.

over one-half of the national sample. In contrast, these items plus blouses/shirts were purchased by almost 90% of working mothers. Over half of working mothers in the survey also purchased jeans (72%), dresses (68%), sneakers (66%), sweaters (64%), and sports clothes (52%). The average amount spent on women's apparel during the year by working mothers was \$686. However, 43% of these women spent less than \$300.

Consumers looking for quality and good workmanship in apparel and home furnishings do look for the "Made in U.S.A." label, according to a study designed to measure the effectiveness of the Crafted With Pride in U.S.A. Council's consumer-oriented network television advertising campaign (17). A second study to measure certification mark awareness, conducted by R.H. Bruskin Associates, found 52% of the adult American population reported seeing the "Made in U.S.A." label (17). The Good Housekeeping Institute's Consumer Research Department interviewed 500 women about the quality of American-made clothing. Most of these women considered "Made in U.S.A." clothing to be of better quality than clothing imported from the Far East, specifi-

cally China, Hong Kong, and Taiwan (17). R.H. Bruskin Associates also studied American perceptions on quality of clothing in interviews with over 2,100 men and women. Results showed that 71% of those interviewed perceive U.S.-made clothing better in overall quality than imported clothing. Also, U.S.-made clothing was believed to be longer lasting by 70%; have better material, 69%; have better workmanship, 67%; be available in more sizes, 64%; offer a better value, 61%; and have better variety in material, 53% (16).

Trade in Textiles and Apparel

In 1988 the United States recorded its 33rd consecutive annual textile and apparel trade deficit. In 1987 this deficit reached \$18.9 billion, 15% higher than in 1986. The combined textile and apparel trade deficit for 1988 may fall short of this record; for the first 8 months of 1988 it was 3% lower than during the same period in 1987. Although the textile and apparel trade deficit declined during the first 8 months of 1988, its share of the total U.S. merchandise trade deficit grew from 15.0% in 1987 to 17.9% in 1988. The

trade deficit for textiles for the January-August 1988 period was down 18% from the same period in 1987; the trade deficit for apparel was about the same in 1988 as in 1987.¹

Volume of textile and apparel imports (in square yards equivalent) was down 9% for the first 8 months of 1988 compared with the same period in 1987. Cotton goods were down 9%; wool yardage decreased by 12%; manmade fiber volume was down by 6%; and silk blends and noncotton vegetable fiber textiles and apparel decreased by 37%.

¹Since 1979 the U.S. Department of Commerce has been required by law to report the value of imported goods together with the cost of insuring and transporting the goods. Insurance and freight charges (services, not goods) are not added to the value of exports. This has made the difference between exports and imports—the trade deficit—look about \$1.5 billion higher each month than it really was. Before 1979 the Census Bureau simultaneously published figures for imports on a customs-value basis and a cost + insurance + freight basis. The provision requiring a 48-hour delay in publishing cost-only figures was repealed in August 1988. Both figures for July 1988, released in September 1988, were published simultaneously. Beginning with January's report, to be released in March 1989, only customs-value figures will be shown (4).

Table 2. Annual expenditures on clothing and shoes¹

Year	Per capita expenditures ²		Percent of personal consumption expenditures		Aggregate expenditures	
	Constant dollars (1982)	Current dollars	Constant dollars (1982)	Current dollars	Billions of constant dollars (1982)	Billions of current dollars
1982	536	536	6.1	6.1	124.4	124.4
1983	566	577	6.2	6.0	132.6	135.1
1984	601	620	6.3	6.0	142.2	146.7
1985	617	655	6.3	5.9	147.2	156.4
1986	654	693	6.4	5.9	157.6	167.0
1987	659	732	6.4	5.9	160.5	178.2
1988 ³	649	747	6.2	5.7	159.5	183.4

¹ Includes yard goods, but excludes services such as cleaning and repairing clothing and shoes.

² Calculated by dividing aggregate expenditures for each year by population figures for July of each year.

³ Preliminary figures—average of estimates for first 3 quarters of 1988 (i.e., seasonally adjusted quarterly totals at annual rates).

Sources: Calculated from U.S. Department of Commerce, Bureau of the Census, 1988, Population estimates and projections, *Current Population Reports*, Series P-25, and personal communication; and U.S. Department of Commerce, Bureau of Economic Analysis, 1988, *Survey of Current Business* 68(7):51 (tables 2.2 and 2.3), and personal communication.

It is estimated that 50% of the apparel in the U.S. marketplace is now imported (31) and that the United States receives almost 60% of the apparel exported by developing countries (10).

U.S. textile exports were up 22% during the first 6 months of 1988 compared with the same period in 1987, and apparel exports were up 36%. However, the majority of the increase in apparel exports went to Mexico and Caribbean Basin Initiative (CBI) countries as cut pieces that were then assembled and imported back into the United States as finished garments (3).

On September 28, 1988, President Reagan vetoed the bill that would restrict imports of textiles, apparel, and shoes, stating that the bill "would have disastrous effects on the U.S. economy" and "impose needless costs on American consumers, threaten jobs in our export industries, jeopardize our overseas farm sales and undermine our efforts to obtain a more open trading system for U.S. exports." (11) On October 4, 1988, the U.S. House of Representatives failed to override the President's veto by the required two-thirds majority with a 272 to 152 vote (18).

On January 1, 1989, the present U.S. Tariff Schedules were replaced by the Harmonized Tariff Schedules, thus bringing the U.S. schedules into conformity with those of the rest of the world. Many changes concern textile products, including classifying and taxing imports of blends by chief fiber weight instead of chief fiber value and the elimination of description and tariffs for ornamental textile and apparel products (3).

In 1987 China was the largest foreign supplier of textiles and apparel. A new 3-year bilateral textile trade pact controlling virtually all China's textile and apparel exports to the United States was signed in December 1987 (1). In 1988 the United States and Brazil signed a 4-year bilateral trade pact covering all cotton, wool, and manmade fiber textiles and apparel. Bilateral agreements were also renewed for 4 years

with Jamaica, Sri Lanka, and the Dominican Republic (2).

Asian clothing manufacturers are establishing production facilities in Caribbean countries such as Haiti, Jamaica, Dominican Republic, and Costa Rica. These Caribbean Basin Initiative countries enjoy duty-free and quota-free access to the American market, provided the clothing they make is from fabric made in the United States (13).

Wool textile imports were mostly apparel (58%) and floor coverings (19%). Nearly half of the wool apparel imports were from Hong Kong (19%), Korea (15%), and China (11%) (see table 3). Over half of wool floor covering imports were from India (20%), Belgium (17%), and China (15%). In contrast, more than half of the woolen fabric imports were from Italy (41%) and the United Kingdom (14%).

Supplies, Prices, and Consumption of Fibers

The 1988 mill consumption of total fibers is estimated at 51.7 pounds per capita. This includes 14.3 pounds of cotton, 0.6 pound of wool, and 36.8 pounds of manmade fibers. Per capita use in 1987 was 53.3 pounds, including 15.5 pounds of cotton, 0.6 pound of wool, and 37.2 pounds of manmade fibers.

Since 1982, a recession year, per capita domestic consumption (mill consumption plus imports less exports) of all fibers has grown from 46.8 to 69.1 pounds, a 48% increase (23).

Cotton. The 1988 cotton crop is estimated at 14.8 million bales, about the same as in 1987. U.S. cotton exports are estimated at 4.7 million bales for 1988/89, 29% below 1987/88. The United States is expected to have a 20% share of the world cotton trade, compared with 27% in 1987/88. To make U.S. cotton more competitive in world markets, the Secretary of Agriculture in August 1988 amended the regulations for determining the prevailing world market price, adjusted to U.S. quality and location. The Secretary also announced revisions in the price support loan program that would reduce the cost of redeeming cotton under loan with cash.

In 1987 textile imports accounted for over 40% of total domestic cotton consumption, a record proportion. An estimated 19% of the cotton in U.S. textile imports originated in the United States, down from 25-27% in recent years. As in previous years, most U.S. cotton textile imports were shipped from countries that bought little or no U.S. raw cotton. About 36% of all cotton textile imports were shipped from countries that purchased less than 1% of total U.S. raw cotton exports. Countries using at least 50% U.S. cotton in their U.S. textile imports include the Philippines (83%), Korea (74%), Ireland (68%), El Salvador (55%), and Japan (50%).

Cotton's share of consumer product consumption (16) is given in table 4, p. 11.

Table 3. Major sources of U.S. imports in apparel, 1987

Country	Wool	Cotton	Manmade	Silk	Linen, jute, ramie
Percent					
Hong Kong	19	20	11	33	25
Korea	15	8	16	27	24
China	11	13	11	21	37
Taiwan	4	9	23	(1)	7
Italy	7	(1)	(1)	5	(1)
Other	44	50	39	14	7

¹ less than 1%

Wool. U.S. farm prices for wool averaged 49% above 1987 levels for the first 8 months of 1988. Mill consumption of apparel wool during the first 6 months of 1988 was 2% below the 1987 level. Imports of raw wool during this same period were about 3% above a year earlier.

Domestic consumption of virgin wool has increased by 85% in the period from 1980 to 1986. During this same period, wool in apparel products increased by 38%; in sweaters, 70%; in women's wear excluding sweaters, 37%; and in men's wear, 32% (21).

Manmade fibers. Shipments of manmade fibers by U.S. producers during the first 8 months of 1988 were 2% above shipments a year earlier (24). About 69% of the raw fiber used in U.S. goods in 1987 was manmade, including 99% of carpet fibers, 52% of apparel fibers, and 43% of fibers used in home furnishings. Since 1983 apparel and home furnishings have comprised decreasing shares of manmade fiber total use (24).

During the first week of November 1988, Avtex Fibers Inc., a major producer of rayon fiber, abruptly shut down its textile mill in Front Royal, VA. Factors blamed for the closing included increases in raw material costs (wood pulp), foreign competition for the rayon used in clothing and automobile parts, and charges of damage to the environment and violations of State health and safety laws (8). Because Avtex

was the exclusive producer of a special rayon fiber used on the space shuttle's solid fuel rocket booster, NASA, the Defense Department, and rocket-maker Morton Thiokol Inc., signed purchase agreements with Avtex, making it possible for the mill to reopen within the week. However, this special rayon yarn only accounts for 6% to 8% of the company's total sales, and the future of the company remains uncertain (9).

USDA Research on Fibers and Fabrics

ARS scientists at the Southern Regional Research Center (SRRC) have developed a new process for applying a flame retardant finish to cellulosic fabrics. The new process has two major advantages. By substituting urea for the gaseous ammonia used commercially, no special equipment is required to control for fumes. Also, a wider range of colors and types of dyes is possible because of bonding that occurs between the positive charge of the polymer and the negative charge of the dye (26).

Fabrics of 100% cotton that can be laundered over 65 times and still dry smooth with no wrinkles can be made with new chemical technology developed at SRRC. Also, the fabrics are about 20% stronger than the permanent press fabrics now on the market. By ironing the new fabric, creases can be put in or taken out—a real advantage for the consumer. The new process uses

nontoxic chemicals called polycarboxylic acids, rather than formaldehyde used in today's permanent press. ARS scientists have filed for a patent on four groups of catalysts, or curing agents, that bind the acids to fibers in 15 to 90 seconds under high temperature conditions. Previous catalysts required up to an hour, and at the high temperatures required, the fabric would burn up. Also, there is no vapor, odor, or yellowing. A further advantage is the ability to dye after the permanent press treatment. Manufacturers can garment dye after they determine best selling colors (28).

Scientists at SRRC have developed a new fiber derived from cotton cellulose. The cotton cellulose is treated with ammonia vapors at a high temperature and pressure until its crystalline structure changes. Interatomic distances within the fiber are altered and can be detected by X ray. This fiber, named Cellulose III, is highly stable and, when added to durable-press cotton fabric, promises to improve strength and resistance to wear. Before Cellulosic III can be commercially available, an alternative, less costly method for producing the crystalline substances must be found (25).

Update on Vat-Grown Cotton

Scientists at Texas Tech University and the U.S. Department of Agriculture have discovered a way to grow cotton fibers in the laboratory. The cotton plant is treated chemically to separate its cells, and the loose cells are put in a vat of nutrients (sugar and plant hormones). The cells lose their specialized functions (e.g., leaf cells no longer produce chlorophyll) and pass through an undifferentiated state, and then cellulose polymerization begins. Because each cell grows in opposite directions at the same time, vat-grown cotton fibers have rounded growing tips. In contrast, field-grown cotton is broken off the seed in the ginning process, producing a rough end. The rough end snags other

Table 4. Cotton's share of the apparel and home furnishings market

Item	1987	1986	1975
	Percent		
Total apparel and home furnishings (excluding carpets) . . .	47	44	34
Total apparel	46	43	(1)
Women's	39	35	(1)
Men's	56	53	(1)
Girls'	44	41	(1)
Boys'	49	46	(1)
Knitted apparel	44	(1)	20
Total home furnishings	53	50	(1)

¹ Data are not available

fibers and gathers them into a pill. Also, because vat-grown cotton is produced under sterile conditions, there is no microbial contamination, which is responsible for brown-lung disease among textile workers (20).

Other research directed toward reducing the risk from byssinosis, or brown lung disease, has led to the discovery that endotoxins (bacterial substances causing the disease) can be safely removed from raw cotton before processing by using any of three solvents that can deactivate the endotoxin molecules. After treatment, the solvent is extracted from the cotton by filtration, centrifugation, or other means. Current methods involve filtering for cotton dust, and washing at high temperatures and steaming to reduce endotoxins in cotton lint. These current procedures, though adequate, adversely affect cotton quality (27).

Developments in Fibers and Fabrics

A new acrylic fiber for athletic socks has been developed by E.I. DuPont de Nemours & Co. Called Ultratech Orlon, the fiber is credited with transporting moisture 42% faster than the next best fiber on the market, and three times faster than cotton (which absorbs water). The fiber has a channel-T cross section that helps move moisture along the fiber surface and through the channel for faster evaporation, and a spiral helix construction that works like a spring. When spun into yarn, this construction creates thousands of air pockets that provide a natural cushioning effect (19).

The DuPont Company has also introduced AccuColor Orlon, a fiber dyed in the polymer form. Because a dye bath is not needed, DuPont will guarantee that there will be no shade deviation between dye lots. In addition to color accuracy, dry spinning offers more bulk and surface area, better cover and wickability, and hues that stay true with outstanding fastness to washing (14).

A series of performance Dryline fabrics using Hydrofil nylon to wick

moisture away from the skin of the wearer have been developed. Hydrofil nylon has a unique chemical structure that cannot be washed out or worn off. Stretch Dryline (by Allied, W. L. Gore, and Hind Performance) combines Hydrofil nylon with polyester and spandex for winter weight outerwear. Hydrofil nylon taffeta linings offer breathability, and freedom from clamminess and wet cling. Other applications of Hydrofil nylon include thermo-underwear fabrics and socks (15).

Federal Rules and Regulations Related to Textiles and Apparel

The Federal Trade Commission has issued amendments to the rules and regulations implementing the Textile Fiber Products Identification Act, the Wool Products Labeling Act, and the Fur Products Labeling Act, effective September 19, 1988. Under the amendments, the record-keeping provisions in each of the three regulations are simplified and streamlined, and the Textile Act and Wool Act regulations are clarified to ensure that affected industry members understand that required disclosures may be combined on a single label. Information required by the rules (name, fiber content, country of origin, and care labeling) may be combined with other information on a single label as long as the location and conspicuousness requirements of the required information are satisfied and the combination of information is not misleading. That is, nonrequired information should not interfere with, minimize, detract from, or conflict with required information. Hours spent in labeling and recordkeeping are expected to be reduced by about 18% under the new rules.

Effective January 9, 1989, the Department of Labor (DOL) will lift its 45-year ban on employees working at home in the jewelry, gloves and mittens, button and buckle, handkerchief, and embroideries industries. The ban on homework in women's apparel will remain in ef-

fect (22). Also, DOL proposes, under provisions of the Fair Labor Standards Act, to expand the certification program for homework in these six apparel-related industries. The certification program would be phased in on an industry by industry basis. However, the DOL would not issue certificates authorizing the employment of home workers in any State where the use of home workers would conflict with State labor standards or health and safety laws. DOL proposes to add a requirement to the process of application for certification that the employer provide assurances that all home workers will be employed in compliance with the provisions of the Fair Labor Standards Act and all applicable regulations with respect to the payment of wages, employment of minors, and recordkeeping. A simplified home-worker handbook will be used to provide home workers with the information necessary to accurately record daily and weekly hours worked; employers will ensure that these handbooks are completed accurately and in a timely fashion.

Uses for the Computer in Marketing Apparel

Retail establishments customarily maintain inventory control with computers. Soon sales tags will be bar coded so that electronic scanners can be used to identify and record sales, and automatic ordering or re-ordering by computer will be available (12).

At least one store, Nordstrom's, tracks hourly sales by department with a computer. Sales by individual employees are made available within 24 hours, and results are posted so that employees can compare how they are performing. Nordstrom's has been using this procedure as a motivational tool for 3 years in all its 48 stores (32).

A Rochester Institute of Technology professor has designed a computer program that can help consumers decide which product to buy. The customer keys in answers to questions about preferences,

personal characteristics, and price ranges. Then the computer matches the data with available products (5).

Researchers at Georgia Tech have modified a 36-inch-wide Xerox Corporation machine, normally used for architects' blueprints, so it can produce patterned bolts of cloth. Xerographic printing is expected to be much faster and less expensive than conventional printing methods. Patterns can be produced in days, compared with the weeks now required to transfer designs onto metal printing screens. Eventually, fabric copiers could be available at the retail level for custom printing of wall coverings and sheets. Funded by the U.S. Department of Energy, xerography printing promises big savings in water and energy. Commercial application is several years away (6).

In 1987 the average video shopper made six purchases totaling \$179. Shop-at-home cable TV shows are becoming more specialized. The Fashion Channel sells only clothing and accessories. TelShop has segments limited to home electronics ("Electronic Entertainer"), sporting goods ("Star Pro Shop"), and toys and children's merchandise ("For Kids Only") (7).

An electronic system named "Prodigy" will allow consumers to purchase from more than 70 stores through a computer and a telephone. Consumers also will be able to do banking at home and buy airline tickets, stocks, and bonds. Software for IBM and IBM-compatible PC's is available, and consumers in San Francisco, Atlanta, and Hartford, CT, may currently subscribe (33). The service is expected to be offered in the Baltimore-Washington area during the spring of 1989 (34).

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Housing Affordability: Concept and Reality¹

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The outlook for affordable housing is influenced by interactions among consumer characteristics that limit household income and the level of public and private sector involvement in providing low-cost housing. Whereas younger households are finding it difficult to purchase their first home, older households are benefiting from sizeable home equity accumulations. The home ownership rate among younger households (under 35 years old) has been decreasing since 1974. Rates for older households (60 years and older) are expected to continue to increase. Projected increases in mortgage interest rates will contribute to a decline in the overall home ownership rate. In 1985 there was a nationwide deficit in affordable rental housing of almost 4 million units. The construction and management of low-income rental housing is not cost-effective without government support in the form of tax incentives, rental subsidies, and insured mortgages. Increased local and State involvement in housing programs via bond financing, use of Community Development Block Grant funds for housing, and local initiatives in providing assistance and shelter for the homeless will help compensate for reduced Federal support. Professionals in family resource management need to know what affordable housing options are available in their communities.

Several interrelated and interdependent variables generally influence the outlook for housing. Major factors include the prospect for economic growth, the availability and cost of mortgage financing, housing costs as compared with consumer income, and the balance between the supply and the demand for housing. Demand for housing is tied closely to demographic trends

such as residential mobility, family size and composition, and household formation; whereas housing supply is a function of the participation of both public and private sectors in the production and distribution of housing.

Although closely associated with these basic variables, housing affordability is a more complex phenomenon. The term "affordable" implies a match between consumer income and housing costs. For a young father of two with a working spouse and an annual family income of \$35,000, a means of providing affordable housing may be to purchase a single-family detached home in the suburbs with three bedrooms, two baths, a carport, and some play space for the children. For a young father of two who has lost his job, a means of providing affordable housing may be to abandon his family and sleep in the park so that his wife and children can qualify for a bunk in one of the shelters for the homeless. In both of these examples, fulfilling the desire for affordable housing requires matching family and, sometimes, community resources to available housing.

The outlook for affordable housing, therefore, is influenced by interactions among consumer characteristics that limit household income (e.g., education, employment, etc.) and the level of public and private sector involvement in providing low-cost housing. An adequate supply of affordable housing can be

defined as "a number of shelter options available to consumers that require less than 30% of the household income for occupancy." Although home ownership is the desired tenure status in the United States, it is not an alternative for many low- and moderate-income consumers. The outlook for housing affordability—housing options—must be considered separately for persons seeking to buy or rent housing units.

Outlook for Affordable Housing—Buyer's Market

Since World War II, the dream of home ownership has been a reality for a majority of American households. Young families enjoyed the prosperity of the times and eagerly anticipated home ownership. Until the eighties the country experienced uninterrupted growth in the home-ownership rate (from 44.0% in 1938 to an all-time high of 68.1% in 1981). However, an unparalleled increase in the cost of new and existing housing in recent years has made home ownership less available to first-time home buyers.

Of the new single-family homes sold in 1987, the median price rose approximately 14.1%, up from the 5.5% increase in 1985, and the 9.1% increase in 1986. Overall, new home prices rose from \$35,900 in 1974 to a projected \$105,000 at the end of 1987 (table 1).

Although the cost of existing housing has traditionally been lower than the cost of new housing, concomitant cost increases in existing housing also have occurred. The median price of existing homes rose by 6.4% in 1986 and by 6.7% in 1987, compared with only 4.3% in 1985 (table 1). Overall, existing home prices rose from \$32,000 in 1974 to an estimated \$85,700 in 1987. The approximate \$20,000 difference in the 1987 cost of new and existing houses indicates that many first-time

¹ This article is adapted from a paper presented at the Annual Agricultural Outlook Conference in November 1988 in Washington, DC.

Table 1. Median prices for single-family homes, 1974-87

Year	New homes		Existing homes	
	Dollar cost	Percent increase	Dollar cost	Percent increase
1974	35,900	—	32,000	—
1975	39,300	9.5	35,300	10.3
1976	44,200	12.5	38,100	7.9
1977	48,800	10.4	42,900	12.6
1978	55,700	14.1	48,700	11.9
1979	62,900	12.9	55,700	14.4
1980	64,500	0.3	62,200	11.7
1981	68,900	6.8	66,400	6.7
1982	69,300	0.05	67,800	2.1
1983	75,300	8.7	70,300	3.7
1984	79,900	6.1	72,400	3.0
1985	84,300	5.5	75,500	4.3
1986	92,000	9.1	80,300	6.4
1987	¹ 105,000	14.1	¹ 85,700	6.7

¹ NAHB forecast.

Source: National Association of Home Builders, *Housing Background*, January 1988 (2).

home buyers find existing housing more affordable.

Aside from initial cost factors, interest rate projections and family income also impact housing affordability. An analysis of housing affordability data reported by the National Association of Home Builders reveals the major impact of interest rates on a family's ability to purchase housing (table 2, p. 16). As the interest rate decreases, so do total monthly expenses and annual income requirements. At the same time, the number of families able to afford the lower costs also increases. Assuming that expenses equal 28% of income, approximately \$2,500 in additional annual income is required to purchase the same house for each percentage increase in the interest rate. Concurrently, the total number of families with enough income to purchase a house is reduced by 2.0% to 4.0% for each percentage increase in interest rate.

As of November 1, 1988, interest on fixed-rate mortgages ranged from 10.0% to 10.5%; variable and adjustable rate mortgages were about 1.75

to 2.00 percentage points lower. Slight increases in interest rates on both types of mortgages have been observed and are predicted to continue signaling more difficulty for would-be home buyers. Increases in interest rates and housing costs severely hamper first-time home buyers in securing affordable housing because they lack the equity accumulations available to previous homeowners.

Decreases in the home-ownership rate among younger households have been seen for the past 12 to 15 years (table 3, p. 16). However, they will continue to increase for households in higher age brackets who purchased housing in past years and are now beneficiaries of sizeable home equity accumulations. Without major decreases in housing costs, home-ownership rates among younger households will continue to decline. Projected increases in mortgage interest rates will also contribute to a decline in the overall home-ownership rate.

Outlook for Affordable Housing – Renter's Market

Although some individuals and families choose to rent housing for numerous life-style, economic, and convenience factors, the large majority of low- and moderate-income families rent because they have no other viable alternative. Of the 241 million people who lived in the United States in 1986, one in seven (over 32 million people) lived below the poverty line (3). This number is equal to the total population of the States of Alaska, Wyoming, Vermont, Delaware, North Dakota, South Dakota, Montana, Nevada, New Hampshire, Kansas, Arkansas, Oklahoma, Mississippi, and 10 other States in the Nation. Almost one in every three people live in a household whose income is less than \$15,000. The primary financial problem for most of these households is paying for housing. A critical concern for low-to-moderate income households is that the demand for affordable rental housing is rapidly increasing while the supply of affordable units is dwindling. In 1987, 4.7 million renter households had incomes under \$5,000 (an increase of more than 2 million households from 1974).

The Rental Housing Crisis Index for 1985 (5) reported a nationwide deficit of 3,942,936 units. The percentage deficit by State ranged from a high of 267.7 in California to a low of 12.6 in Mississippi. Three States (California, New Jersey, and Nevada) and the District of Columbia had deficits in excess of 200% of the number of units needed to house its low-income population. Stated another way, in these States, for the total number of low-income households living in affordable housing, twice as many other households could not find suitable housing that matched their income. A quick comparison of the rental vacancy rate, with increases in median asking rents from 1978 to 1986, reveals that

the vacancy rate in rental units is highly sensitive to increases in median asking rents.

For many years it was believed that the private housing market could meet the needs of low-income renters. However, for the past several decades the housing needs of the "poor" have been facilitated by Government intervention in (1) the actual construction of public housing units (the primary housing assistance program from the late thirties

through the midsixties); or (2) providing incentives to private and nonprofit developers to build low- and moderate-income rental units (the primary Federal approach of the "War on Poverty" legislation).

Specifically, the construction and management of low-income rental housing is not cost-effective in the absence of government support such as tax incentives, rental subsidies, insured mortgages, and so forth. In fact, the last two major Federal

efforts² directed toward providing rental housing for low- and moderate-income families were based solely on private sector involvement in housing development and delivery. These two programs alone added more than 355,390 units of multifamily rental housing to the Nation's housing stock.

² Through amendments to the 1949 National Housing Act—Section 221d-3 (1961) and Section 236 (1968).

Table 2. Affordability of housing, based on a 30-year fixed-rate mortgage

Interest rate	Monthly principal and interest payment	Property taxes and insurance	Total monthly expenses	Annual income needed to afford	Families having income needed	
					Number (millions)	Percent
\$76,500 mortgage (\$85,000 purchase) ¹						
9%	\$616	\$125	\$741	\$31,744	21.8	35.2
11%	729	125	854	36,586	16.8	27.1
13%	849	125	974	41,726	12.7	20.5
15%	972	125	1,097	46,995	9.4	15.1
17%	1,094	125	1,219	52,222	7.1	11.4
\$90,000 mortgage (\$100,000 purchase) ¹						
9%	725	145	870	37,271	16.1	26.0
11%	858	145	1,008	42,969	11.8	19.1
13%	999	145	1,144	49,009	8.3	13.4
15%	1,143	145	1,288	55,178	6.1	9.8
17%	1,287	145	1,432	61,347	4.3	6.9

¹ 10% downpayment

Source: National Association of Home Builders, Public Affairs Division, *Housing Background*, January 1988 (2).

Table 3. Average home ownership rates, by age of household head, 1974-87

Year	Age of household head (years)							
	25-29	30-34	35-39	40-49	50-59	60-69	70 and over	25 and over
1974-78	43.1	62.2	69.3	75.4	77.5	75.2	68.9	67.4
1979-81	43.0	60.5	70.0	75.4	78.8	77.8	70.9	68.1
1982-85	38.0	55.0	66.1	73.5	78.9	79.2	73.3	66.3
1986-87 ¹	36.6	53.6	64.5	72.4	79.0	79.7	73.7	65.6

¹ 3rd quarter.

Source: Calculated from National Association of Home Builders, *Housing Background*, January 1988 (2).

Primary among incentives offered by the legislation was a "sunset" clause that allowed prepayment of Government-backed mortgages in 20 years. Following prepayment, the units can be converted to whatever use the owner desires. As legislation establishing both Section 221d-3 and Section 236 was passed more than 20 years ago, approximately 17,276 units are currently eligible for prepayment, with another 265,971 units eligible for conversion between 1989 and 1994 (table 4). Of the total number of units available under both programs, only 20% will be available after 1994.

Although it is difficult to estimate the exact number of units that will actually be converted, a crisis in the rental market for low- to moderate-income multifamily housing is likely to occur. Observation of the Housing Crises Index by HUD region and State suggests that some regions and States are more vulnerable to the possible loss of units than others (table 5). Generally, States with the highest crisis index could possibly lose the highest number of units. (Initially, these States had the highest number of units built.) Also, the crisis index only measures unit cost to renters; it does not consider the physical condition of the units. As expected, States in Regions 4 and 6 (primarily southern rural States) generally had lower housing crisis indices, but the physical quality of housing in the rural South is lower than in any other section of the country.

In the past, demolitions, conversions, renovations, and rent increases have played a major role in the declining number of affordable private-market rental units. Condominium conversions and rent increases likely will continue to be attractive alternatives for private sector holders of low-income units because these two options offer greater potential for maximizing profits.

In summary, the outlook for affordable housing for low- to moderate-income households may appear to be bleak in the absence of

Table 4. Number of Section 221d-3 and Section 236 units eligible for prepayment, by year

Year	Number of projects	Number of units	Percent of total
1982-88	130	17,276	5.0
1989-91	781	92,754	26.1
1992-94	1,679	173,217	48.7
1995-97	462	55,334	15.6
1998-2000	76	11,188	3.1
2001-2006	49	4,774	1.3
Undetermined	8	852	.2
Total	3,185	355,395	100.0

Source: U.S. Department of Housing and Urban Development (5).

Table 5. Units eligible for prepayment 1989-94 and Rental Housing Crisis Index for 1985, by HUD region and State

Region	Eligible units ¹	Rental Housing Crisis Index ²	Region	Eligible units ¹	Rental Housing Crisis Index ²
<u>Region 1</u>			<u>Region 6</u>		
Connecticut	8,852	180.3	Arkansas	3,909	19.9
Massachusetts	11,566	136.7	Louisiana	6,793	45.4
Maine	1,179	71.8	New Mexico	931	41.7
New Hampshire	1,924	97.4	Oklahoma	3,798	51.5
Rhode Island	3,713	106.4	Texas	21,858	75.9
Vermont	634	95.2			
<u>Region 2</u>			<u>Region 7</u>		
New Jersey	3,825	229.7	Iowa	3,404	63.0
New York	8,073	137.6	Kansas	1,262	47.5
<u>Region 3</u>			Missouri	6,360	57.6
Delaware	259	123.7	Nebraska	1,332	50.3
Washington, DC	1,212	213.1	<u>Region 8</u>		
Maryland	10,603	180.3	Colorado	2,470	125.6
Pennsylvania	10,354	73.6	Montana	1,190	32.4
Virginia	7,489	88.6	North Dakota	316	46.6
West Virginia	129	11.4	South Dakota	1,639	29.1
<u>Region 4</u>			Utah	955	99.3
Alabama	2,816	29.7	Wyoming	444	55.5
Florida	8,228	126.2	<u>Region 9</u>		
Georgia	9,186	54.4	Arizona	3,493	90.3
Kentucky	5,026	32.7	California	27,295	267.7
Mississippi	2,258	12.6	Hawaii	1,693	51.1
North Carolina	5,240	35.3	Nevada	221	264.1
South Carolina	4,606	24.2	<u>Region 10</u>		
Tennessee	5,609	48.4	Alaska	564	15.7
<u>Region 5</u>			Idaho	979	58.3
Illinois	11,740	79.1	Oregon	4,114	141.1
Indiana	10,924	59.7	Washington	8,683	116.7
Minnesota	5,431	110.5	<u>NATION</u>		
Michigan	11,723	110.0		265,971	93.7
Ohio	4,191	92.3			
Wisconsin	5,478	97.0			

¹ Data provided by the U.S. Department of Housing and Urban Development (5).

² Data provided by the Center on Budget and Policy Priorities, *Holes in the Safety Net*, April 1988 (5).

major Government interventions. In March 1988, The National Housing Task Force (3) reported that in 1983 more than 6 million low-income families paid more than half of their incomes for rent. Of the total 12.9 million low-income renter households, only 28% benefited from Federal housing programs. Additionally, for the past 10 years, Government support for low- and moderate-income housing has been drastically reduced. The HUD budget has been slashed from 7.4% of the Federal budget in 1978 to less than 1% in 1988 (1). However, because of wide media coverage of the growing number of homeless in the Nation (estimates range from 250,000 to 3 million persons), the political environment once again appears receptive to some housing support for the poor, as well as for young first-time home buyers.

Two questions remain unanswered: (1) What is the most cost-effective approach that will serve the housing needs of all sectors? and (2) How will support for housing (especially housing for the poor) fare in competition with other critical political issues such as the solvency of Social Security and Medicare, the rising national debt, and increases in health care costs?

In response to the former question, increased local and State involvement in housing programs via bond financing, use of Community Development Block Grant funds for housing, and local initiatives in providing assistance and shelter for the homeless have recently emerged as a result of reduced Federal support. Continued expansion of these efforts should improve the future availability of affordable housing.

Employer-assisted housing is also a new phenomenon that improves the outlook for affordable housing in

the future (4). Benefits for employees are increasingly being directed to housing. Ownership assistance through mortgage guarantee and insurance programs, interest rate subsidies, down-payment loans, and shared-equity loans are frequently included in employee fringe-benefit packages. Corporate construction subsidies and/or corporate donations to community housing programs are being used to provide assistance to renter households. Because these programs currently enjoy the support of labor and management, they are expected to expand.

In response to the latter question, support for housing probably will not fare very well in competition with other critical needs. Ideally, housing production and delivery are viewed as functions of the private market, whereas Social Security and Medicare benefits have been placed in the public trust. This difference alone suggests that support for these programs will take precedence over support for housing. The need to reduce the national debt is unquestionable. Although Federal efforts at debt reduction may, in the short term, limit Federal initiatives in housing, the long-term benefits of such action (economic growth and a stable economy) should have a positive impact on housing.

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The Declining Middle-Class Thesis

In recent years, a number of studies have indicated that increasing proportions of the U.S. population lie in the lower and upper income classes, creating a decline in the size of the middle class. Findings from these studies differ as to the extent to which the middle class has declined and how this decline has been divided between the lower and upper classes. This lack of agreement among findings can be attributed to variations in both the definition and measurement of the middle class.

The Bureau of Labor Statistics examined data on family income from the March Current Population Survey¹ to track changes in the proportions of families in the lower, middle, and upper income classes over the 1969-86 period. The sensitivity of the findings was assessed by choosing alternative income intervals for defining the three classes, evaluating different methods for measuring changes in class size over time, and examining these changes from both a secular and cyclical perspective.

Determining the Middle Class

Family income (total money income) was chosen to define middle class, based on both economic and cultural considerations. Individuals in families experience significant economies of scale in consumption that do not exist for single individuals,

and about four-fifths of Americans lived in families in 1987. In addition, the cultural view of the middle class regards the family as the typical income unit. Two criteria were selected to determine a range of middle-class income intervals for use in this study. First, the lower end point of the 1986 middle-class income interval had to be between 60% and 90% of median family income in that year (\$29,460). This would ensure that the lower end point of the middle class represents an income significantly above the poverty level, which was about one-third of median family income in 1986. Second, in any given year, a middle-class interval would be acceptable only if it yields a middle class containing between 40% and 60% of families. Also, the upper end of each middle-class income interval was restricted so that the upper class would always have at least 5% of families.

Two techniques were used to make comparisons of the three classes over time. The **interval deflator approach**, in which a price index is used to deflate income intervals, maintains the purchasing power of the middle class over time. The second technique defines the middle class in each year as consisting of those families whose incomes are within given percentages of median family income for that year. This **fixed percentage of median income approach** preserves the relative position of the middle class in the overall distribution of incomes over time. To eliminate the sensitivity of the findings to the choice of years, regression analysis was used with each technique to determine the secular nature of changes in size of each income class over the 1969-86 period. Trend lines were estimated

for each of the lower, middle, and upper class income intervals selected for this study by isolating cyclical movements (the peaks and troughs in business cycles) and then estimating the remaining secular trend.

Findings

When the **interval deflator approach** was used, the results supported the declining middle-class thesis. Three price indexes were used to test the sensitivity of the findings to the choice of an index. There was a consistent decline in the middle class across a substantial range of alternative income intervals. However, the choice of price index affected the relative size of the lower income class. When the Consumer Price Index for All Urban Consumers (CPI-U) was used, the decline in the middle-income class was accompanied by an *increase* in the proportion of the lower income class. In contrast, the decline in the middle associated with the Consumer Price Index for All Urban Consumers, Experimental Measure 1 (CPI-U-X1) was accompanied by a *decline* in the proportion of families in the lower income class. The Fixed Weight Personal Consumption Expenditure Index (FW-PCE) showed a *substantial decline* in the relative size of both the middle and lower classes. It was concluded that any examination of the declining middle-class thesis using an interval deflator approach would be quite sensitive to the choice of a price index. The percent distribution of families in the lower, middle, and upper income classes using alternative price indexes for the years 1969 and 1986 is shown in table 1, p. 21.

¹The Current Population Survey is a monthly household survey, conducted for the Bureau of Labor Statistics, U.S. Department of Labor, by the Bureau of the Census, U.S. Department of Commerce.

Table 1. Percent distribution of families in the lower, middle, and upper classes, using alternative price indexes, 1969 and 1986

Price index and year	Middle-class income interval	Lower class	Middle class	Upper class
			Percent	
CPI-U-X1: ¹				
1986	\$20,000 – 55,999	31.7	53.0	15.3
1969	7,180 – 20,104	33.7	58.8	7.5
CPI-U: ²				
1986	20,000 – 55,999	31.7	53.0	15.3
1969	6,680 – 18,704	30.4	60.0	9.7
FW-PCE: ³				
1986	20,000 – 55,999	31.7	53.0	15.3
1969	7,440 – 20,832	35.6	57.8	6.7

¹ Consumer Price Index for All Urban Consumers, Experimental Measure 1.

² Consumer Price Index for All Urban Consumers.

³ Fixed Weight Personal Consumption Expenditure Index.

Source: Horrigan, Michael W., and Steven E. Haugen, 1988, The declining middle-class thesis: a sensitivity analysis, *Monthly Labor Review* 111(5):3-13.

Table 2. Percent distribution of families in the lower, middle, and upper classes, using fixed percentage interval of median income, 1969 and 1986

Year	Middle-class income interval	Lower class	Middle class	Upper class
1986	\$20,000 – \$55,999	31.7	53.0	15.3
1969	\$6,404 – \$17,931	28.7	60.2	11.1

¹ The percentage of median family income used to define the end points of the middle class are roughly 68 and 190.

Source: Horrigan, Michael W., and Steven E. Haugen, 1988, The declining middle-class thesis: a sensitivity analysis, *Monthly Labor Review* 111(5):3-13.

When the fixed percentage of median income approach was used, the results also supported the declining middle-class thesis. The middle class declined from 1969 to 1986 for an even broader range of income intervals than was seen using the interval deflator technique. Both lower and upper classes experienced increases in relative size. The proportions of families in the upper, middle, and lower income classes using the fixed percentage approach for the years 1969 and 1986 are shown in table 2.

Although these findings suggest that the lower income class has in-

creased in relative size over the 1969-86 period, the share of aggregate income held by this group has either remained the same or declined. Despite differences between the fixed percentage and interval deflator methods in measured effects, both point to a decline in per-family share of total aggregate income for families in the lower class. This finding is consistent with those in other studies that indicate an increase in income inequality over the past two decades.

Proportions of families in the lower, middle, and upper income classes are cyclically sensitive.

Consequently, if year-to-year comparisons are made, it is inappropriate to choose years at cyclically dissimilar points in business cycles. A comparison of each recession with its subsequent recovery period shows a definite cyclical pattern in the shift in distribution of family income, with the lower class growing during recessions but then recovering to its prerecession share in the subsequent economic expansion.

Source: Horrigan, Michael W., and Steven E. Haugen, 1988, The declining middle-class thesis: a sensitivity analysis, *Monthly Labor Review* 111(5):3-13.

Money Income and Poverty Status of Families

Money Income

For the fifth consecutive year, real median family income¹ increased between 1986 and 1987, bringing it to a level comparable to that of 1973, an earlier all-time high. Median family income in 1987 was 1% higher than in 1986 (see table, p. 21). Real per capita income for 1987 was at an all-time high, increasing 1.6% over its 1986 level.

In March 1988, nearly 80% of all families were married couples with a 1987 median family income of \$34,700 (a 2% increase from 1986 in real terms). This is the fifth consecutive year real income for married couples has increased. For families with a female householder, no husband present, median income (\$14,620) increased 3.4% from 1986. For these families, this increase is the first significant annual increase

¹ Changes in real income refer to comparisons after adjusting for inflation. The percentage change in prices between 1986 and 1987 was computed by dividing the annual average Consumer Price Index for all urban consumers for 1987 by the annual average for 1986.

Comparison of median family income in 1987 and 1986 [1987 dollars]

Characteristics	1987	1986	Percent change
All families	\$30,853	\$30,534	*1.0
Type of family:			
Married couples	34,700	34,004	*2.0
Female householder, no husband present	14,620	14,146	*3.4
Race:			
White	32,274	31,935	*1.1
Black	18,098	18,247	-0.8
Hispanic ¹	20,306	20,726	-2.0
Education: ²			
Less than 8 years	14,547	14,616	-0.5
8 years	18,102	19,192	*5.7
High school, 4 years	29,937	29,765	0.6
College:			
1 to 3 years	36,392	35,455	*2.6
4 years	46,533	47,269	-1.6
Number of earners ³			
None	12,849	12,963	-0.9
1	23,192	23,125	0.3
2	36,990	36,391	*1.6
3	46,961	45,925	*2.3
4 or more	59,445	57,689	*3.0
Region:			
Northeast	33,938	33,335	1.8
Midwest	30,991	30,665	1.1
South	28,250	27,684	*2.0
West	32,026	32,096	-0.2
Earnings of year-round, full-time workers:			
Male	26,008	26,179	-0.7
Female	16,909	16,825	0.5

* Significant at the 90% confidence level.

¹Persons of Hispanic origin may be of any race. ²Restricted to families with householder 25 years old and over. ³Excludes families with Armed Forces members.

Source: U.S. Department of Commerce, Bureau of the Census, 1988, *Money Income and Poverty Status in the United States, 1987* (Advance data from the March 1988 Current Population Survey), Current Population Reports, Consumer Income, Series P-60, No. 161.

since 1984 and only the second significant annual increase since 1979. Between 1986 and 1987, the median income of white families (\$32,274) increased by 1.1%, whereas the median family incomes of black (\$18,098) and Hispanic-origin families (\$20,306) did not change significantly.

There were considerable differences in 1987 median family income by level of education of the householder. Median income ranged from \$14,547 for families in which the householder had less than 8 years education, to \$54,491 for families in which the householder had 5 or more years of college education. Between 1986 and 1987, families showing a significant change in income were those where the householder had 8 years of education (5.7% decline) or 1 to 3 years of college education (2.6% increase).

Real increases occurred in all families with two or more earners, but 1987 median family income was not statistically different from 1986 levels in one-earner families.

For the second year, the South made gains on the rest of the country in real median family income, with a 2% increase from 1986. Also, the South was the only region to show significant change. Regional changes by race, however, were somewhat different from the data for all races combined. White families posted significant gains in the Northeast and Midwest, whereas no significant changes were noted for black or Hispanic families in any region of the country.

Poverty

In 1987, 13.5% of the Nation's population (32.5 million) were below the official Government poverty

level, not significantly different from 1986. Both the number of poor and the poverty rate have declined since 1983 (the recent peak for these figures) but remain above their 1978 levels (the recent low point). Between 1986 and 1987, the poverty rate among whites decreased by 0.5 percentage points, while the rate among black persons increased by 2.0 percentage points; 10.5% of whites and 33.1% of blacks were in poverty. Among persons living on farms, the poverty rate declined to 12.6% in 1987, 7.0 percentage points below the 1986 level.

Source: U.S. Department of Commerce, Bureau of the Census, 1988, *Money Income and Poverty Status in the United States, 1987* (Advance data from the March 1988 Current Population Survey), Current Population Reports, Consumer Income, Series P-60, No. 161.

Employment Characteristics of Older Women

In 1950, only 2 of 10 workers age 55 and over were women. Since then early retirement by men and increased labor force participation by women in their mid-fifties have expanded that proportion rapidly. While labor force participation rates for older men have declined, those for older women have remained remarkably stable over the last 20 years (see table 1). According to the Current Population Survey (CPS),¹ 4 in 10 older workers are female. In 1987, 6.2 million, or 20% of all women age 55 or older were in the labor force. Understanding who older workers are and why they continue to work or leave the labor market is important in helping them maintain their employment.

Women born at different time periods have different worklife patterns. Many of today's older women reached employment age at a time when women were not usually expected or encouraged to work. Subsequent changes in attitudes towards women's work force participation have had a lasting effect. Not only have participation rates risen with each successive cohort, but there have been fundamental changes in worklife patterns as well. Fewer than one-half of today's older women were in the work force when they were in their early twenties. Their participation rates dropped even further during childbearing years, and then rose to a peak in their late forties or early fifties. Participation rates for today's younger women, however, started high and continued to rise with no dropoff during childbearing years. Their labor force patterns more closely resemble those of their fathers than their mothers.

¹ The Current Population Survey is a monthly household survey (including 59,500 households in 1987) conducted for the Bureau of Labor Statistics by the Bureau of the Census.

Women continue to be employed in female-dominated occupations (see table 2). In 1987, two-thirds of those age 55 and over and one-half of those age 25 to 34 were employed in the traditionally female job categories of sales, administrative support (including clerical work), and services. Opportunities in non-traditional categories (such as medicine, accounting, engineering, and management) have occurred almost exclusively for young women.

According to the CPS, work pattern differences can be found within the group of women 55 years and over. Those in their late fifties usually work full time, year round and are evenly represented across most job categories, whereas older women in the 65-and-over group work part-

time and are over represented in some jobs (such as sales and service) and under represented in others (such as executive, administrative, and managerial positions).

The Social Security Newly Entitled Beneficiary Survey (NBS) assessed retired worker benefits in 1982. Results showed that women without pensions were three times more likely to be employed than women with pensions. The NBS also found that health status played a role in determining whether older women worked, but was of less importance than the receipt of pension benefits. Respondents who were physically limited and without pensions were twice as likely to be employed as healthy persons with pensions.

Table 1. Labor force participation rates, by age and sex, 1967 and 1987

Age (years)	Women		Men	
	1967	1987	1967	1987
	Percent			
25 to 54	47.3	71.9	96.6	93.7
55 to 64	42.4	42.7	84.4	67.6
55 to 59	48.4	52.2	90.1	79.7
60 to 64	35.5	33.2	77.5	54.9
65 and over	9.6	7.4	27.2	16.3
65 to 69	17.0	14.3	43.5	25.8
70 and over	5.8	4.1	17.6	10.5

Source: Herz, Diane E., 1988, Employment characteristics of older women, 1987. *Monthly Labor Review* 111(3):3-12, U.S. Department of Labor, Bureau of Labor Statistics.

Table 2. Percent distribution of employed women, by occupation of women and age, 1987

Occupation	Age (years)		
	25 to 34	55 to 64	65 and over
	Percent		
Executive, administrative, and managerial	11.3	9.8	8.2
Professional (teachers and health care)	16.4	11.7	10.2
Technicians and related support	4.5	1.7	1.1
Sales	10.9	12.6	14.9
Administrative support (including clerical)	29.2	29.6	24.1
Services	15.5	19.6	29.1
Precision production, craft, and repair	2.3	2.5	2.7
Operators, fabricators, and laborers	9.0	10.6	6.8
Farming, forestry, and fishing	.9	1.8	2.9

Source: Herz, Diane E., 1988, Employment characteristics of older women, 1987. *Monthly Labor Review* 111(3):3-12, U.S. Department of Labor, Bureau of Labor Statistics.

Education is an excellent predictor of labor force patterns. It affects whether older women will work, their likelihood of finding a job, whether they will work full or part time, the type of position they will hold, and the amount of pay they will receive (see table 3). Completion of high school dramatically increases the likelihood that older women will be in the labor force. In 1987 almost one-half of women age 55 to 64 with 4 years of high school were working, compared to less than one-third of those of the same age group with less education. Of older women who were employed in 1986, those with the most education worked the fullest schedules.

Marital status is another factor affecting working patterns. Because labor force participation by women age 55 and over is partially based on their retirement resources, married women with the benefit of a husband's income as well as their own were less likely to be employed. In contrast, a large number of never-married and divorced women continue working beyond normal retirement age. In 1987, 70% of divorced women age 55 to 59, compared to 45% of women with husbands, were working. After age 65, divorced women were three times more likely to be in the labor force than were married women. The labor force participation rate for divorced women far exceeds that of never-married or widowed women. Divorced women often rely primarily on their own income for support; they may have started their careers late, and thus have accumulated limited pension resources.

According to the CPS, older black women have a greater attachment to the labor market than older white women. The NBS reported that black men and women were less likely than whites to receive pensions, own homes, or hold other valuable assets, and that older black women were less likely to be married than older white women. As a result, black women have fewer resources for retirement and are more likely to continue working to support them-

Table 3. Annual median earnings of full-time, year-round workers, by sex, age, and education, 1986

Age (years)	Total	Education		
		8 years or less	High school, 4 years	College, 4 years or more
<u>Women</u>				
25 to 34	\$16,813	\$10,269	\$14,424	\$21,883
35 to 44	18,179	10,358	15,761	25,326
45 to 54	17,450	10,314	16,206	25,861
55 to 64	16,066	10,616	16,085	24,211
65 and over	13,217	8,239	13,601	21,403
<u>Men</u>				
25 to 34	22,607	12,101	20,540	27,693
35 to 44	27,991	15,714	25,633	34,189
45 to 54	28,955	18,989	26,969	39,932
55 to 64	27,326	17,881	26,957	39,366
65 and over	23,922	15,843	24,488	38,976

Source: Herz, Diane E., 1988, Employment characteristics of older women, 1987, *Monthly Labor Review* 111(2):3-12, U.S. Department of Labor, Bureau of Labor Statistics.

selves. Also, due to lower levels of education and limited employment opportunities, older black women were concentrated in a narrow range of low-paying jobs. For example, in 1987 those age 55 and over were three times more likely to be employed in service occupations than older white women.

Vast differences in both educational and employment opportunities between older and younger black women have resulted in very different occupational employment patterns between the two groups. The most notable is in the percentage working in private households. In 1987, 33% of black working women age 65 and over worked as cooks, servants, or cleaners, compared with only 1% of those age 25 to 34.

The CPS reported that earnings was a critical source of income for older women who continued to work. In 1986, median earnings was \$11,141 annually for women in their late fifties and early sixties and \$5,348 for those age 65 and over. The lower earnings for the oldest women reflects their more marginal work schedules. Full-time, year-round earnings were substantially higher for women age 55 to 64 (\$16,066) than for those 65 and over

(\$13,217) (see table 3). Although earnings depended on a number of factors, the best predictor was education. Older women with 4 or more years of college earned between 2 and 3 times as much as those with 8 years of school or less. Annual median earnings for black and white women age 55 to 64 were \$13,801 and \$16,370, respectively. Sex differences in earnings proved to be of greater importance than race differences, however, as both groups of women earned less than older black men (\$17,556) and older white men (\$28,165).

Many of the the labor force patterns displayed by older women in 1987 may never be repeated. In the future, older women will have substantially more work experience than their mothers and grandmothers. Differences in work history dependent on race and marital status will lessen, and women's retirement decisions will be similar to those of men.

Source: Herz, Diane E., 1988, Employment characteristics of older women, 1987, *Monthly Labor Review* 111(2):3-12, U.S. Department of Labor, Bureau of Labor Statistics.

Personal Bankruptcies

Personal bankruptcies have risen sharply over the past 3¹/₂ years, even though employment and aggregate personal income have registered solid growth. In 1984, approximately 300,000 personal bankruptcy cases were filed. In 1987 this number increased to nearly 500,000 cases. This unusual countercyclical upswing in personal bankruptcies has generated considerable puzzlement and some concern.

Although the number of bankruptcies has risen most rapidly in the major oil-producing States (Oklahoma, Texas, Louisiana, Colorado, and Wyoming), subtracting these States from the total reduces the rate of increase between the second quarters of 1985 and 1986 by only 6% (from 36% to 30%). Thus, the recent surge in personal bankruptcies does not appear attributable in any significant way to special problems in specific regions.

The rapid growth in consumer debt is probably a key factor underlying the increase in personal bankruptcies. The aggregate debt-to-income ratio climbed sharply between 1984 and 1988, from a level of around 14% (that had held during most of the previous decade) to a

record 19% by mid-1987. Therefore, during the current business expansion, a rapid rise in bankruptcies and a strong upsurge in debt burden have occurred together. With unemployment trending downward and household wealth and incomes growing substantially during the period, the growth of debt appears to be the one major macroeconomic force that moves in a direction consistent with increases in bankruptcies.

Aggregate figures on debt can obscure important distributional features that may affect bankruptcy rates. Between 1983 and 1986, a large increase in debt was acquired by people considered to be high-debt households (those with a debt-to-income ratio of 40% or higher), thereby making their financial situation more precarious. As a result, only about half of high-debt households in 1986 had asset holdings (including home equity) large enough to fully cover their debts, compared with about 80% in 1983.

Changing attitudes toward bankruptcy may be another factor that helps to account for the accelerated pace of bankruptcy filings. Several societal developments have seemed to diminish the stigma once attached to bankruptcy. Widespread use of consumer credit has made bankruptcy less rare and, therefore, has rendered the bankrupt indivi-

dual a less conspicuous figure. The many revisions in the laws and regulations concerning debtor rights may reflect changing attitudes. The Truth-in-Lending Act, restrictions on collection tactics of creditors, and the Bankruptcy Reform Act of 1978 seem to suggest that bankruptcy is not a shameful process resulting from personal failings but a respectable means of handling a situation for which the debtor may be largely blameless.

Advertising by lawyers (legally permissible since 1977) also may stimulate bankruptcies by creating a climate in which bankruptcy is more readily seen as a legitimate response to financial distress. Other social factors that could be contributing to the rise in bankruptcies include the divorce rate and the trend toward dual-earner families. Although the divorce rate rose steadily in the sixties and seventies, stability in the overall divorce rate since 1980 seems to contradict any notion that a sudden worsening of marital relations might account for the bankruptcy activity in recent years. The trend toward two-earner families might affect bankruptcy rates if couples base the levels of their spending and borrowing on the total amount of their dual incomes. Interruption of either income could jeopardize a family's financial stability.

Although bankruptcy rates have made a small impact on profit margins of creditors, there is no evidence to date that creditors have tightened loan standards. The stability of the debt-to-income ratio since its peak in early 1987 provides some hope of moderation in bankruptcy increases. Nevertheless, rising numbers of personal bankruptcies could begin to affect lending or spending patterns, particularly if the current strength in employment and household net worth should weaken.

The U.S. Bankruptcy Code

In its current form, the U.S. bankruptcy code contains five operative chapters (7, 9, 11, 12, and 13) under which bankruptcy petitions may be filed. Chapter 9 applies exclusively to municipalities and chapter 11 primarily to business reorganizations. Individuals most commonly file under Chapters 7 or 13. Chapter 7 provides for liquidation of assets and discharge of debt and may be used by business or nonbusiness petitioners. It accounts for about 70% of all bankruptcies, and of these, about 85% are classified as nonbusiness. Chapter 13 provides for wage-earner plans that involve the full or partial repayment of debts while assets are shielded from creditor action. It is limited to individuals; but insofar as an individual may be a sole proprietor with mostly business-related debts, Chapter 13 also embraces both business and nonbusiness cases. About 95% of Chapter 13 cases involve nonbusiness petitioners. Chapter 12, added to the statute in 1986, is the newest operative section of the bankruptcy code. It makes available to family farmers the equivalent of a Chapter 13 repayment program. Chapter 12 cases are classified as business bankruptcies.

Source: Lockett, Charles, A. 1988, Personal bankruptcies, *Federal Reserve Bulletin* 74(2):591-603, Board of Governors of the Federal Reserve System, Division of Research and Statistics.

New Publications

The following publications are for sale from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402, (202) 783-3238:

- **1988 Yearbook of Agriculture—Marketing U.S. Agriculture.**
SN001-000-04517-2. July 1988.
\$9.50 (327 pp.)
- **Fact Book of United States Agriculture, 1988.**
SN001-000-04520-2. August 1988.
\$4.25. (167 pp.)

Interesting agricultural information is provided in this fact book, which can be used as a handy reference guide for students, farm organization leaders, and agribusiness leaders.

- **The Nonmetro Elderly: Economic and Demographic Status.**
SN001-019-00570-0. June 1988.
\$2.00. (35 pp.)

This report from the Economic Research Service examines the demographics of the nonmetro elderly and compares the social, demographic, and economic characteristics of older people living in metro areas with those living in nonmetro areas.

- **County and City Data Book.**
SN003-024-06709-9. November 1988. \$36.00. (958 pp.)

Almost 1,000 pages of statistics on 3,139 counties and almost 11,000 cities or places in the United States are included in the 11th edition of **County and City Data Book**. Local and demographic data are given, including a table showing the top-ranking county in each State according to 24 variables. (The statistics also are available

on diskettes. For more information call Customer Services, Data User Services Division, Bureau of the Census (301) 763-4100.)

- **Trends in Family Income: 1970–1986.**
SN052-070-06417-0. February 1988. \$6.00. (119 pp.)

What demographic and economic factors have influenced the trends in family incomes? A study from the Congressional Budget Office examines what has happened to the incomes of different types of families since 1970. Figures and tables are used throughout to present the data.

Single copies of the following are available from the Consumer Information Center. Write to R. Woods, Consumer Information Center-F, P.O. Box 100, Pueblo, CO 81002:

- **A Consumer's Guide to Mortgage Refinancing.**
427V. 1988. \$0.50. (7 pp.)

The cost of refinancing a home and the right time to refinance are discussed in this pamphlet from the Federal Reserve Board.

- **The Consumer's Guide to Long-term Care Insurance.**
460T. 1988. \$0.50 (12 pp.)

By 1990, nearly 7.7 million Americans over 65 years of age will need some form of long-term care. The Department of Health and Human Services, with the assistance of the American Association of Retired Persons and the Health Insurance Association of America, examines all aspects of long-term care coverage and cost.

Revision of CPI Medical Care Services Component

The medical care services component of the Consumer Price Index (CPI) underwent several changes when the revised CPI was introduced in January 1987. Revised CPI expenditure weights for the CPI-U (all urban consumers) and CPI-W (urban wage earners and clerical workers) are based on Consumer Expenditure Survey (CEX) data (see box) for 1982-84. (Data from the 1972-73 CEX were used for the CPI from 1978 through 1986.)

The 1982-84 CEX data showed that as a proportion of total consumption, the medical care services component was smaller than that of the 1972-73 CEX. This decline results from the changing ways in which consumers pay for medical care. Because the CPI reflects only consumer expenditures, employer- and government-provided benefits are not included. In the decade between the two expenditure surveys, the number of these third-party-provided benefits increased. Thus, while medical care prices have risen at a rapid rate over the past decade, average consumer unit expenditures on medical care rose less rapidly due to employer- and government-provided benefits.

The CEX is composed of two separate surveys—an interview survey and a diary survey—both conducted by the Bureau of the Census for the Bureau of Labor Statistics. Expenditure weights for all of the medical care services categories were calculated from the interview survey. These expenditures reflect both out-of-pocket expenses not covered by insurance and health insurance premiums paid by survey households.

Health Insurance

A number of definitional changes related to medical care services have been introduced in the revised CPI. (see table, p. 27). The most significant of these is how health insurance premiums¹ in the CPI are represented in the expenditure weights. Insurance premiums may be viewed as purchasing (1) the services of the insurance carrier in administering the policy, and (2) the medical care for which benefits are paid. Previously, the entire insurance premium was classified as health insurance. In the revision, the CPI item labeled health insurance is defined as the portion of premium payments retained by the insurer in the form of operating expenses and profit, and represents the weighting together of the retained earnings of Commercial Carriers, Blue Cross/Blue Shield, health maintenance organizations, and Medicare Part B² and Medicare supplement policies. The expenditure weight for each medical care item is the combination of direct (out-of-pocket) and indirect (paid from health insurance) expenses.

Four basic factors affect changes in the cost of health insurance premiums: (1) Increased or decreased medical care costs; (2) changes in health insurance provider administrative costs, surplus requirements, and profit (for commercial carriers); (3) changes in the benefits covered by health insurance policies; and (4) utilization (the frequency of claims made under a health insurance policy) changes. Changes in costs should be reflected in the index; changes in covered benefits and utilization are changes in quality or quantity and should not be reflected.

¹ Health insurance represents only expenditures by consumers for premiums. Employer contributions are not included.

² Medicare Part A (hospitalization) is not relevant to the CPI because it is an entitlement program paid through payroll deduction as opposed to insurance or a prepayment plan that consumers purchase by paying premiums, that is, Medicare—Part B—Medical Insurance.

In pricing premiums directly, BLS found it impossible to account for quality differences. This led to a switch to the current indirect method of pricing health insurance. This indirect approach enables the Bureau to reflect in the CPI an estimate of the impact on premium levels of changes in the prices of medical care services covered by health insurance policies, as well as changes in the costs of administering the policies and maintaining reserves and, as appropriate, profits.

Pricing Medical Services

A sample of 91 urban areas was selected to represent all urban areas in the country. Within each of these areas, the Census Bureau conducts a Point of Purchase Survey for BLS to identify not only how much consumer units spend for each category of consumption, but also where they make the purchase.

For pricing medical services, BLS field representatives start with a general entry-level category, such as physicians' services, and successively narrow the definition stage by stage using probability selection methods based on revenues and volume information supplied by the respondents. This process yields a representative sample of the variety of services provided, and the resulting price index is, thus, an accurate reflection of price change for the entry-level category. This direct pricing method is called disaggregation.

Prior to the 1987 revision, the collected medical care service prices represented the rate patients paid for professional services and the published charges for hospitals. However, because professional and hospital-related services were used to move the index weights for both out-of-pocket expenses not covered by insurance and insurance benefit payments, the Bureau decided to determine if alternative fees were available for such priced services. BLS conducted a survey in 1985 to identify the prevalence of medical care service providers charging different rates to patients covered by health insurance. Physicians were

Definition of published medical care service Indexes

Item	Old series	New series
MEDICAL CARE SERVICES	Professional and hospital services; health insurance imputation.	Professional and hospital services; health insurance imputation and dispensing of eyeglasses and outpatient services at hospitals.
<u>Professional Medical Services</u> (old title: Professional Services)	Physicians; dentists; other professionals, such as optometrists, ophthalmologists, podiatrists, chiropractors.	Physicians; dentists; other professionals, such as optometrists, ophthalmologists, opticians, psychologists, and therapists.
Physicians' services	Includes all services by medical physicians in private practice, other than dental and eyecare, that are billed by the physician. Includes house, office, clinic, and hospital visits by general practitioners, internists, osteopaths, and other specialists. Excludes podiatrists and other medical practitioners who are not MD's. Ophthalmologists are included in other professional services.	Includes all services by medical physicians in private practice, other than dental and eye care, that are billed by the physician. Includes house, office, clinic, and hospital visits by general practitioners, internists, osteopaths, and other specialists. Excludes podiatrists and other medical practitioners who are not MD's. Ophthalmologists are included in Eye Care.
Dental services	Includes dental services performed by dentists, oral or maxillofacial surgeons, orthodontists, periodontists, or other dental specialists in group or individual practice. Some of the specific services included are cleanings, extractions, fillings, orthodontic work, periodontal treatment, bonding, dental sealants, treatment for temporomandibular joint problems, root canal therapy, dentures, bridges, crowns, and orthognathic surgery. Treatment can be provided in the office or in the hospital.	Includes dental services performed by dentists, oral or maxillofacial surgeons, orthodontists, periodontists, or other dental specialists in group or individual practice. Some of the specific services included are cleanings, extractions, fillings, orthodontic work, periodontal treatment, bonding, dental sealants, treatment for temporomandibular joint problems, root canal therapy, dentures, bridges, crowns and orthognathic surgery. Treatment can be provided in the office or in the hospital.
Other professional services	All services performed by other medical professionals, such as podiatrists, chiropractors, psychologists; eye care provided by optometrists and ophthalmologists.	Discontinued.
Eye care	New index.	Services provided by optometrists, ophthalmologists, and opticians. Includes dispensing of eyeglasses and surgical procedures performed by ophthalmologists in or out of the office.
Services by other medical professionals	New index.	Includes services performed by other professionals such as psychologists, chiropractors, therapists, and nurse practioners in or out of the office.
Other medical care services	Hospital services, nursing homes, and health insurance imputation.	Discontinued.
<u>Hospital and Related Medical Services</u> (old title: Hospital and Other Medical Services)	Hospital services that include hospital room and board, inpatient services, emergency room visits, and nursing home care.	Hospital services that include hospital room and board, inpatient services, and outpatient services that include emergency room, and nursing home care.
Hospital room	Room and board for any type of hospital room, such as private, semiprivate, routine nursery, ward, intensive care, or coronary care that is billed by the hospital.	Room and board for any type of hospital room, such as private, semiprivate, routine nursery, ward, intensive care, or coronary care that is billed by the hospital.
Other hospital and medical care services	Inpatient hospital services such as laboratory tests, radiology, operating room, pharmacy, and emergency room that are billed by the hospital and nursing home care.	Discontinued.
Other inpatient services	New index.	Hospital services for inpatients, such as pharmacy, laboratory tests, radiology, and operating room that are billed by the hospital and nursing home care.
Outpatient services	New index.	Hospital services for outpatients, such as laboratory tests, radiology, short stay units, ambulatory surgery, physical therapy, and emergency room that are billed by the hospital.

Note: As part of the CPI revision, BLS has created new indexes under medical care services by separating previously combined items: Eye Care from other professional services; Other Inpatient Services, from other hospital and medical care services; and Outpatient Services, from other hospital and medical care services. Indexes for other professional services, other medical care services, and other hospital and medical care services have been discontinued.

Source: Ford, Ina Kay, and Philip Sturm, 1988, CPI revision provides more accuracy in the medical care component, *Monthly Labor Review* 111 (4):17-26, U.S. Department of Labor, Bureau of Labor Statistics.

the only respondents that reported available alternate fees for selected services with enough frequency to be useful in the disaggregation process.

One of the most difficult conceptual problems faced in compiling the CPI is to identify accurately and factor out of price measurement any changes in the quality of priced items. The Bureau attempts to identify the quality level of an item by including all of the relevant quality-determining attributes in the description of each unique item priced. To determine if a quality change has occurred, BLS obtains the current specifications for the item and compares them to the previous specifications. Those surveyed in the Point of Purchase Survey may identify the change as (1) a pure price change, (2) a change in the characteristics of the currently priced procedure or service, or (3) a combination of the two. Some quality changes may be counted as price changes inadvertently; improved technologies and procedures can lead to quality changes that cannot be measured by the BLS in every instance (e.g., a change in the ratio of nurses to patients).

Source: Ford, Ina Kay, and Philip Sturm, 1988, CPI Revision provides more accuracy in the medical care component, *Monthly Labor Review* 111(4):17-26, U.S. Department of Labor, Bureau of Labor Statistics.

245 Medicare Catastrophic Coverage Act 1988

On July 1, 1988, President Reagan signed into law the "Medicare Catastrophic Coverage Act," considered the most extensive overhaul of the Medicare program since its enactment in 1965. Medicare¹ has two separate,

¹Medicare is the Federal health insurance program available to most persons aged 65 or older who worked under the Social Security or Railroad Retirement systems, their spouses, and some disabled persons.

complementary parts: Hospital Insurance (HI), Part A, and Supplemental Medical Insurance (SMI), Part B. HI provisions include payments for inpatient hospital services such as a semi-private room, operating room, and nursing services. Physician services, outpatient hospital services, and home health services are covered under the SMI program, which beneficiaries may elect when they reach age 65.

The new health insurance bill was designed to provide protection to elderly and disabled beneficiaries who incur catastrophic medical expenses due to illness or injury. The three major objectives of the new plan are to (1) cap beneficiary out-of-pocket dollar amounts for medical expenses, (2) be self-financing, and (3) be affordable for Medicare beneficiaries.

Both parts of the Medicare program are affected by the new law. Some of the changes resulting from the 1988 legislation are:

An annual HI deductible. Effective January 1, 1989, under Part A, recipients meeting an annual deductible (estimated to be \$594 in 1989) will have all remaining incurred costs paid by Medicare, regardless of the number of hospital admissions. The introduction of this deductible coincides with the elimination of the "benefit period" and "reserve days" features of the old system.

An increase in the number of covered days in skilled-nursing facilities. Effective January 1, 1989, the number of covered days for stays in skilled-nursing facilities under Part A has been increased from 100 per "benefit period" to 150 per year. In addition, the requirement that beneficiaries must have been hospitalized at least 3 days before admission to a skilled-nursing facility has been eliminated under the new plan. The coinsurance payment will be based on 20% of the daily cost of the first 8 days of skilled nursing care (estimated to be \$20.50 per day in 1989).

Limit on beneficiaries' out-of-pocket expenses. Effective January 1, 1990, under Part B, enrollees will pay the first \$75 for services in each year and a 20% copayment of each approved Medicare charge. If the out-of-pocket expenses for copayments and deductibles exceed the limit (\$1,370 for 1990), the program will pay 100% of the Medicare approved charges.

Outpatient prescription drugs. Under Part B, after a beneficiary meets a \$600 deductible, a portion of the cost of outpatient prescription drugs will be covered. In 1991, beneficiaries will be responsible for 50% of the costs after the deductible has been met; 40% in 1992 and 20% in 1993 (depending on program costs in 1993). This takes effect for some drugs taken at home in 1990 and will cover all outpatient drugs in 1991.

Premium amounts. Effective in 1989, the new benefits will be financed by two premium payments. One premium (\$4 per month in 1989) will be paid by all Medicare enrollees. The second payment is a supplemental "income-related" premium, applying to all beneficiaries who must pay taxes and are eligible for Part A coverage. The premium will be collected by the Internal Revenue Service along with the individual's annual Federal income taxes. The rate for this premium will be \$22.50 per year for each \$150 of Federal income taxes paid, with a maximum premium amount of \$800 in 1989.

Source: U.S. Department of Health and Human Services, Social Security Administration, 1988, Social Security in review: The 1988 Medicare Catastrophic Coverage Act, *Social Security Bulletin* 51(2):2.

Cost of Food at Home

Cost of food at home estimated for food plans at 4 cost levels, December 1988, U.S. average ¹

Sex-age group	Cost for 1 week				Cost for 1 month			
	Thrifty plan	Low-cost plan	Moderate-cost plan	Liberal plan	Thrifty plan	Low-cost plan	Moderate-cost plan	Liberal plan
FAMILIES								
Family of 2: ²								
20-50 years	\$42.80	\$53.90	\$66.70	\$82.80	\$185.40	\$233.60	\$288.70	\$358.90
51 years and over	40.40	51.70	64.00	76.70	175.00	224.10	277.00	331.90
Family of 4:								
Couple, 20-50 years and children—								
1-2 and 3-5 years	62.20	77.50	94.90	116.40	269.40	335.90	410.90	504.70
6-8 and 9-11 years	71.30	91.10	114.10	137.50	309.00	394.70	494.30	595.60
INDIVIDUALS ³								
Child:								
1-2 years	11.20	13.60	15.90	19.10	48.50	59.00	68.80	82.90
3-5 years	12.10	14.90	18.40	22.00	52.40	64.50	79.60	95.50
6-8 years	14.80	19.70	24.70	28.80	64.20	85.30	106.90	124.70
9-11 years	17.60	22.40	28.80	33.40	76.30	97.00	124.90	144.60
Male:								
12-14 years	18.40	25.40	31.70	37.20	79.90	110.00	137.50	161.30
15-19 years	19.10	26.30	32.60	37.80	82.70	113.90	141.30	163.90
20-50 years	20.40	26.10	32.70	39.50	88.50	113.00	141.60	171.30
51 years and over	18.50	24.80	30.60	36.70	80.30	107.40	132.40	158.90
Female:								
12-19 years	18.30	22.00	26.70	32.30	79.40	95.30	115.70	139.90
20-50 years	18.50	22.90	27.90	35.80	80.00	99.40	120.90	155.00
51 years and over	18.20	22.20	27.60	33.00	78.80	96.30	119.40	142.80

¹ Assumes that food for all meals and snacks is purchased at the store and prepared at home. Estimates for the thrifty food plan were computed from quantities of foods published in *Family Economics Review* 1984(1). Estimates for the other plans were computed from quantities of foods published in *Family Economics Review* 1983(2). The costs of the food plans are estimated by updating prices paid by households surveyed in 1977-78 in USDA's Nationwide Food Consumption Survey. USDA updates these survey prices using information from the Bureau of Labor Statistics, *CPI Detailed Report*, table 3, to estimate the costs for the food plans.

² 10 percent added for family size adjustment. See footnote 3.

³ The costs given are for individuals in 4-person families. For individuals in other size families, the following adjustments are suggested: 1-person—add 20%; 2-person—add 10%; 3-person—add 5%; 5- or 6-person—subtract 5%; 7- or more-person—subtract 10%.

Consumer Prices

Consumer Price Index for all urban consumers [1982-84 = 100]

Group	Unadjusted indexes			
	December 1988	November 1988	October 1988	December 1987
All items	120.5	120.3	120.2	115.4
Food	120.7	120.2	120.3	114.7
Food at home	119.1	118.7	119.0	112.8
Food away from home	124.1	123.7	123.4	118.9
Housing	120.2	119.9	119.9	115.6
Shelter	129.3	129.1	128.8	123.7
Renters' costs ¹	134.1	134.2	134.8	129.1
Homeowners' costs ¹	134.0	133.8	133.1	128.0
Household insurance ¹	130.6	130.2	130.4	126.2
Maintenance and repairs	115.8	115.4	115.0	113.3
Maintenance and repair services	118.4	118.2	117.6	116.6
Maintenance and repair commodities	112.4	111.7	111.6	109.1
Fuel and other utilities	105.0	104.3	105.4	102.0
Fuel oil and other household fuel commodities	76.8	75.0	74.6	80.5
Gas (piped) and electricity	104.1	103.7	105.8	100.9
Household furnishings and operation	110.6	110.6	110.3	107.3
Housefurnishings	105.9	106.1	105.9	103.3
Housekeeping supplies	117.0	116.5	115.6	112.5
Housekeeping services	115.9	115.7	115.5	111.4
Apparel and upkeep	118.0	119.9	120.7	112.7
Apparel commodities	116.3	118.4	119.3	111.0
Men's and boys' apparel	117.3	118.2	117.6	110.7
Women's and girl's apparel	116.5	120.2	121.9	112.6
Infants' and toddlers apparel	117.3	117.2	118.1	114.5
Footwear	113.5	114.5	115.9	107.2
Apparel services	126.7	126.3	125.5	121.4
Transportation	110.8	110.7	110.0	107.6
Private transportation	109.6	109.6	109.0	106.5
New vehicles	119.0	118.4	117.2	116.4
Used cars	120.2	119.7	119.9	116.3
Motor fuel	80.3	81.5	81.6	82.0
Automobile maintenance and repair	121.5	121.5	121.1	116.9
Other private transportation	132.5	132.1	131.0	123.8
Other private transportation commodities	100.3	99.4	99.3	97.5
Other private transportation services	139.3	139.1	137.7	129.2
Public transportation	126.5	125.3	124.2	122.1
Medical care	142.3	141.8	141.2	133.1
Medical care commodities	144.2	143.3	143.2	134.9
Medical care services	141.9	141.5	140.8	132.7
Professional medical services	140.8	140.4	139.8	131.8
Entertainment	122.8	122.2	121.8	117.4
Entertainment commodities	117.5	117.2	116.3	112.6
Entertainment services	130.0	129.3	129.4	124.3
Other goods and services	141.3	141.0	140.6	132.1
Personal care	122.4	121.8	121.0	116.5
Toilet goods and personal care appliances	121.6	120.7	119.8	115.0
Personal care services	123.1	122.7	122.0	117.9
Personal and educational expenses	153.0	152.7	152.4	143.4
School books and supplies	152.2	152.1	152.0	142.4
Personal and educational services	153.2	152.9	152.7	143.6

¹ Indexes on a December 1982 = 100 base.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

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